# BEST AVAILABLE COPY

# PATENT COOPERATION TREATY

	From the INTERNATIONAL BUREAU
PCT	To:
NOTIFICATION OF THE RECORDING OF A CHANGE  (PCT Rule 92bis.1 and Administrative Instructions, Section 422)  Date of mailing (day/month/year) 07 February 2001 (07.02.01)	GOLDSTEIN, Steven, J. Frost Brown Todd LLC 2500 PNC Center 201 E. 5th Street Cincinnati, OH 45202 ETATS-UNIS D'AMERIQUE
Applicant's or agent's file reference 91830/661	IMPORTANT NOTIFICATION
International application No.	International filing date (day/month/year)
PCT/US00/13488	16 May 2000 (16.05.00)
The following indications appeared on record concerning:	
	X the agent the common representative
Name and Address GOLDSTEIN, Steven, J.	State of Nationality State of Residence
GOLDSTEIN, Steven, J.	
Frost & Jacobs LLP 2500 PNC Center	Telephone No.
201 E. 5th Street	513 651 6131
Cincinnati, OH 45202 United States of America	Facsimile No.
Since States of America	513 651 6981
	Teleprinter No.
<i>i</i>	
2. The International Bureau hereby notifies the applicant that the	ne following change has been recorded concerning:
the person the name X the add	
Name and Address	State of Nationality State of Residence
GOLDSTEIN, Steven, J. Frost Brown Todd LLC	
Frost Brown Todd LLC 2500 PNC Center	Telephone No.
201 E. 5th Street	513 651 6931
Cincinnati, OH 45202 United States of America	Facsimile No.
o integration of Afficines	513 651 6981
	Teleprinter No.
Further observations, if necessary:     The indication of a new address of the agent (na considered as a request for recording a change to the International Bureau should be notified immunications.)	Inder Rule 92bis. In case of disagreement
4. A copy of this notification has been sent to:	
X the receiving Office	the designated Offices concerned
the International Searching Authority	X the elected Offices concerned
X the International Preliminary Examining Authority	other:
I ne international Bureau of WIPO	Authorized officer
34, chemin des Colombettes 1211 Geneva 20, Switzerland	Diana Nissen
	Telesham No. (41 20) 200 00 00
Form PCT/IR/306 (March 1994)	Telephone No.: (41-22) 338.83.38

# PATENT COOPERA ON TREATY

	From the INTERNATIONAL BUREAU
PCT	To:
NOTIFICATION OF ELECTION  (PCT Rule 61.2)  Date of mailing (day/month/year)  07 February 2001 (07.02.01)	Commissioner US Department of Commerce United States Patent and Trademark Office, PCT 2011 South Clark Place Room CP2/5C24 Arlington, VA 22202 ETATS-UNIS D'AMERIQUE in its capacity as elected Office
International application No.	Applicant's or agent's file reference
PCT/US00/13488	91830/661
International filing date (day/month/year)	Priority date (day/month/year)
16 May 2000 (16.05.00)	28 May 1999 (28.05.99)
Applicant	
UNIVERSITY OF CINCINNATI et al	
The designated Office is hereby notified of its election made    X in the demand filed with the International Preliminar  29 November  in a notice effecting later election filed with the International Preliminar  29 November  29 November  was not was not made before the expiration of 19 months from the priority Rule 32.2(b).	ry Examining Authority on: 2000 (29.11.00) national Bureau on:
The International Bureau of WIPO	Authorized officer
34, chemin des Colombettes 1211 Geneva 20. Switzerland	Diana Nissen

Telephone No.: (41-22) 338.83.38



#### REQUEST

For receiving Office use only
International Application No.
international Application No.
International Filing Date
*
Name of receiving Office and "PCT International Application"
Applicant's or agent's file reference

The undersigned requests that the present international application be processed according to the Patent Cooperation Treaty. (if desired) (12 characters maximum) 91830/661 Box No. I TITLE OF INVENTION ANTISENSE OLIGONUCLEOTIDES FOR FERTILITY AND MENSTRUAL CYCLE REGULATION AND FOR CHEMOPREVENTIVE AND CHEMOTHERAPEUTIC USE Box No. II APPLICANT Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country. The country of the address indicated in this Box is the applicant's State (that is, country) of residence if no State of residence is indicated below.) This person is also inventor. Telephone No. UNIVERSITY OF CINCINNATI (513) 558-4768 2600 Clifton Avenue Facsimile No. Cincinnati, Ohio 45221-0623 US (513) 558-2296 Teleprinter No. State (that is, country) of nationality: State (that is, country) of residence: This person is applicant all designated States all designated States except the United States of America the United States the States indicated in the Supplemental Box xx for the purposes of: Box No. III FURTHER APPLICANT(S) AND/OR (FURTHER) INVENTOR(S) Name and address: (Family name followed by given name: for a legal entity, full official designation. The address must include postal code and name of country. The country of the address indicated in this Box is the applicant's State (that is, country) of residence if no State of residence is indicated below.) This person is: applicant only LABARBERA, Andrew R. applicant and inventor 3725 Avlesboro Avenue Cincinnati, Ohio 45208-1707 X inventor only (If this check-box is marked do not fill in below.) State (that is, country) of nationality: State (that is, country) of residence: This person is applicant all designated States all designated States except the United States of America the United States the States indicated in for the purposes of: the Supplemental Box Further applicants and/or (further) inventors are indicated on a continuation sheet. Box No. IV AGENT OR COMMON REPRESENTATIVE; OR ADDRESS FOR CORRESPONDENCE The person identified below is hereby/has been appointed to act on behalf of the applicant(s) before the competent International Authorities as: XX agent common representative Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country.) Telephone No. GOLDSTEIN, Steven J. (513) 651-6131 FROST & JACOBS LLP Facsimile No. 2500 PNC Center 201 East Fifth Street (513) 651-6981 Cincinnati, Ohi 45202 US Teleprinter No. Address f r corresp ndence: Mark this check-box where no agent or common representative is has been appointed and the space above is used instead to indicate a special address to which correspondence should be sent.

Continuation of Box No. III FURTHER APPLICANT(S) AND/OR (FURTHER) INVENTOR(S)				
If none of the following sub-boxes is used, this sheet should not be included in the request.				
Name and address: (Family name followed by given name: for a legal entity, full official designation. The address must include postal code and name of country. The country of the dedress included in this Bost whe applicant's State (that is, country) of rendence if mo State of residence is indicated below.)  ZHU, ChangH ng Wuhan, Hubel, China	This person is:  applicant only  applicant and inventor  inventor only (If this check-box is marked, do not fill in below.)			
State (that is, country) of nationality: State (that is, country)	of residence:			
This person is applicant all designated all designated States except the United States of America	he United States the States indicated in the Supplemental Box			
Name and address: (Family name followed by given name; for a legal unity, full official designation. The address must include postal code and name of more of the property of the address indicated in this Dat I the applicant's State (that is, country) of residence if no State of residence is indicated below.)  MANG, YiFang ASNG Parkdale Avenue, #807 Ontario, Canada	This person is:  applicant only  applicant and inventor  inventor only (If this check-box is marked, do not fill in below.)			
State (that is, country) of nationality:  State (that is, country)	of residence:			
This person is applicant for the purposes of:  all designated all designated States except the United States of America of	the United States the States indicated in the Supplemental Box			
Name and address: [Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country. The covering the address indicated in his Bost the applicant's State (that is, country) of residence if no State of residence is indicated below.)	This person is:  applicant only  applicant and inventor  inventor only (If this check-box is marked, do not fill in below)			
State (that is, country) of nationality: State (that is, country)	of residence:			
The state of the s	he United States I the States indicated in the Supplemental Box			
Name and address: fFamily name followed by given name; for a legal entity, full affects designation. The address must include postal code and name of country. The country of the address indicated in his Box is the applicant's State (that is, country) of residence if no State of residence is indicated below.)	This person is:  applicant only  applicant and inventor  inventor only (If this check-bax is marked, do not fill in below.)			
State (that is, country) of nationality: State (that is, country)	of residence:			
This person is applicant all designated all designated States except the Unifed States of America	the United States Ihe States indicated in the Supplemental Box			
Further applicants and/or (further) inventors are indicated on another continuation s	heet.			

Sheet No. 2

. —	_	s	heet No			
Box No. VI PRIORITY C	LAIM		Ε	Further price	ority claims are indicated	in the Supplemental Bo
Filing date	Numb				Where earlier applicat	ion is:
of earlier application (day/month/year)	of earlier app	olication		application: untry	regional application:* regional Office	international applicatio receiving Office
item (1) 28.05' .99	60/136,48	39		us		
item (2) 08.10.99	60/158,61	12		us		
item (3)						
The receiving Office is req of the earlier application(s purposes of the present int	(only if the ear	lier applic	ation was fi	led with the (	Office which for the	(1) and (2)
Where the earlier application is Convention for the Protection of It						
	NAL SEARCH					s-premental box.
Choice of International Search (if two or more International Sea competent to carry out the interna- the Authority chosen; the two-lette	irching Authorities attonal search, indi	cote sear	uest to use i ch has been co (day/month/)	arried out by or	requested from the Intern	to that search (if an earli ational Searching Authority Country (or regional Offic
ISA /us						
Box No. VIII CHECK LIST	; LANGUAGE	OF FILIN	VG			
This international application of the following number of sheets		nternationa fee calcula	• • •	is accompani	ed by the item(s) marke	d below:
request :	5		gned power	of attorney		
description (excluding sequence listing part) ;	66 3. X			-	eference number, if any	:
claims :	18 4.	statement	explaining la	ck of signatur	re .	
abstract :	1 5.	priority do	cument(s) id	entified in Bo	x No. VI as item(s):	
drawings :	2 6. 🗆	2 6. ☐ translation of international application into (language):				
sequence listing part of description :	1 -				-	other biological material
Total number of sheets:	02	other (spec		o acto sequen	ce listing in computer re	adable form
Figure of the drawings which should accompany the abstract:		Lan	guage of fili national app		English	
Box No. IX SIGNATURE O	F APPLICANT	OR AGE	NT			
Next to each signature, indicate the nan	se of the person signi	ing and the o	apacity in whic	h the person sign	s (if such capacity is not obvi	ous from reading the request).
4 ~	40.4					
100-	2 Joldy Ce					
GOLDSTEIN, Steven J.						
$\circ$						
		- For rece	iving Office	use only -		<del></del>
<ul> <li>Date of actual receipt of the p international application:</li> </ul>	urported					2. Drawings:
Corrected date of actual receiptimely received papers or draw the purported international ap	wings completing	t ;				received:
. Date of timely receipt of the re corrections under PCT Article	equired : [1(2):					not received:
. International Searching Autho (if two or more are competent)	rity ISA /		6.	Transmittal ountil search f	of search copy delayed ce is paid.	
		For Interna	tional Burea	use only		
Date of receipt of the record copy by the International Bureau:	′					
- permount distal					<del></del>	<del>, , , , , , , , , , , , , , , , , , , </del>

, inc i	wi	ng designations are hereby made under Rule 4.9(a) (n	nark th	re	cable check-boxes; at least one must be marked);	
Regio						
Ž.		ARIPO Patent: GH Ghana, GM Gambia, KE Kenya, LS Lesotho, MW Malawi, SD Sudan, SL Sierra Leone, SZ Swaziland, UG Uganda, ZW Zimbabwe, and any other State which is a Contracting State of the Harare Protocol and of the PCT				
Ø	EA	Eurasian Patent: AM Armenia, AZ Azerbaijan, BY Belanus, KG Kyrgyzstan, KZ Kazakhstan, MD Republic of Moldova, RU Russian Federation, TJ Tajikistan, TM Turkmenistan, and any other State which is a Contracting State of the Eurasian Patent Convention and of the PCT				
Ø	EP	European Patent: AT Austria, BE Belgium, CH and LI Switzerland and Liechtenstein, CY Cyprus, DE Germany, DK Denmark, ES Spain, FI Finland, FR France, GB United Kingdom, GR Greece, IE Ireland, TT Italy, LU Luxembourg, MC Monaco, NL Netherlands, PT Portugal, SE Sweden, and any other State which is a Contracting State of the European Patent Convention and of the PCT				
Ď		GA Gabon, GN Guinea, GW Guinea-Bissau, ML Ma any other State which is a member State of OAPI and desired, specify on dotted line)	da Co	R Mai	Republic, CG Congo, CI Côte d'Ivoire, CM Cameroon, uritania, NE Niger, SN Senegal, TD Chad, TG Togo, and ting State of the PCT (If other kind of protection or treatment	
Nation	al Pate	at (If other kind of protection or treatment desired, specify	on dot	ted lin	e):	
Ø		United Arab Emirates	_		Liberia	
Ø	ΑĹ	Albania			Lesotho	
Ø		Armenia	⊠.		Lithuania	
'Z		Austria	Ø	LU	Luxembourg	
凶	ΑU	Australia	123	LV	Latvía	
×		Azerbaijan	Ø	MD	Republic of Moldova	
X		Bosnia and Herzegovina	邳	MG	Madagascar	
×		Barbados	$\boxtimes$	MK	The former Yugoslav Republic of Macedonia	
N.		Bulgaria				
図		Brazil	⊠-		Mongolia	
Ø		Belarus	⋈		/ Malawi	
Ø		Canada	Ø		Mexico	
Ø		and LI Switzerland and Liechtenstein	Ø		Norway	
Ø			亙		New Zealand	
図		Czech Republic	9	PL	Poland	
図		Germany	囟	PT	Portugal	
<u>⊠</u> .		Denmark	Ø		Romania	
<u>⊠</u>		Estonia	区	RU	Russian Federation	
×	ES		<b>2</b>	SD	Sudan	
Z	FI	Finland	Ø	SE	Sweden	
区		United Kingdom	Σþ	SG	Singapore Slovenia	
12		Grenada	ΣĮ.	SI SK	Slovakia	
Ø		Georgia	Σ.	SL	Sierra Leone	
×		Ghana		TJ	Tajikistan	
Ø		Gambia	DI DI		Turkmenistan	
ĕ		Croatia	Ø	TR	Turkey	
123		Hungary	=		Trinidad and Tobago	
Ø		Indonesia			Ukraine	
×	IL	Israel			Uganda	

Precautionary Daignation Statement: In addition to the designations with applicant lato makes under Rule 4.9(b) all other designations which would be permitted under the PCT except any designations which would be permitted under the PCT except any designation (s) indicated in the Supplemental Box as being excluded from the scope of this statement. The applicant declares that those additional designations are subject t confirmation and that any designation which is not confirmed bet re the expiration of 15 months from the priority due is to be regarded as withdrawn by the applicant at the expiration of that time limit, (Confirmation of a designation consists of the filing of a notice specifying that designation and confirmation flaces. Confirmation must reach the receiving Office within the 15-month time limit.)

IX LC Saint Lucia

☑ IN India....

KG Kyrgyzstan .....

☑ KP Democratic People's Republic of Korea . . . .

KR Republic of Korea .....

JP Japan .....
KE Kenya .....

.......

≯(AL) ALgeria

US United States of America....

VN Viet Nam .....

ZA South Africa.....

🛛 ZW Zimbabwe .....

Check-boxes reserved for designating States which have become party to the PCT after issuance of this sheet:

(AG)Antigua & Barbuda (CR) Costa Rica

Sheet No. 5....

#### Supplemental Box If the Supplemental Box is not used, this sheet should not be included in the request.

- l. If, in any of the Boxes, the space is insufficient to furnish all the Information: in such case, write "Continuation of Box No. ..." [indicate the number of the Box] and furnish the information in the same manner as required according to the captions of the flox in which the space was insufficient, in particular:
- (i) If more than two persons are involved as applicants audior inventors and no "continuation sheet" is available: in such case, write Continuation of Box No. III " and indicate for each additional person the same type of information started in the Store (III. The country of the address indicated in this Box is the applican" State (that is, State (that is, among) of residence if no State (stress is indicated.
- (ii) If in Box No. If or in any of the sub-bases of Box No. III, the indication "the States Intilicated in the Supplemental Rox" is checked: in such case, write "Continuation of Box No. II" or "Continuation of Box No. III" or "Continuation of Box to No. III" or "Continuation of Box to No. III and No. III" (as the case may be), indicate the name of the applicant(s) involved and, next to (each) such name, the State(s) (and/or, where applicable, ARPO, Euration, European or OAP) patently for the purposes of which the named person is applicable.
- (iii) if, in Box No. 11 or in any of the sub-boxes of Box No. 111, the inventor or the inventor/applicant is not inventor for the purposes of all designated States or for the purposes of the United States of America: in such cose, write "Continuation of Box No. 11" or "Continuation of Box No. 11" or "Continuation of Box No. 11" on the States No. 11 and No. 11" (as the case may be), indicate the name of the inventor(s) and, next to (each) such name, the State(s) (and/or, where applicable, ARIPO, Eurasian, European or OAPI patent) for the purposes of which the named person is inventor;
- (iv) if, in addition to the agent(s) indicated in Box No. 1V, there are further agents: in such case, write "Continuation of Box No. 1V" and indicate for each further agent the same type of information as required in Box No. IV;
- (v) if, in Bax No. V, the name of any State (or OAP) is accompanied by the indication "patent of addition," or "certificate of addition," or if, in Bax No. V, the name of the United States of America is accompanied by an indication "continuation" or "continuation-in-part": in such case, white "Continuation of Bax No. V and the name of each State involved (or OAP), the number of the parent title or parent application and the date of grant of the parent title or filing of the parent application.
- (vi) if, in Box No, VI, there are more than three earlier applications whose priority is claimed: in such case, write "Continuation of Box No, VI" and indicate for each additional earlier application the same type of information as required in Box No. VI;
- (vii) if, in Box No. VI, the earlier application is an ARIPO application: in such case, write "Continuation of Box No. VI", specify the number of the larm corresponding to that earlier application and indicate at least one country party to the Paris Convention for the Protection of Industrial Property for which that earlier application was filed.
- If, with regard to the precautionary designation statement contained in Box No. V, the applicant wishes to exclude any State(s) from
  the scope of that statement: in such case, write "Designation(s) excluded from precautionary designation statement" and indicate tile
  name or two-letter code of each State so exclude any.
- 3. If the applicant claims, in respect of any designated Office, the benefits of provisions of the national law concerning non-prejudical disclosures or exceptions to lack of novelly: in such case, write "Statement concerning non-prejudical disclosures or exceptions to lack of novelly" and furnish that sutenent below.

Continuation of Box IV

ACHESON, Edwin R., Jr. BELLANY, Glenn D. BULLOCK, Kristyne A. GOLDSTEIN, Steven J.

ROBINSON, Ann G. SCHMIT, David E. SPRECHER, Kevin S.

### INTERNATIONAL SEARCH REPORT

International application No.

PCT/US00/13488

IPC(6)	: C12N 5/00, 5/02; A01N 43/04; A61K 31/70; (	2071 21/02 21/04		
US CL	: 435/6, 325, 375; 514/44; 536/23.1, 24.3, 24.5			
According to	International Patent Classification (IPC) or to both n			
B. FIELI	DS SEARCHED			
	cumentation searched (classification system followed 35/6, 325, 375; 514/44; 536/23.1, 24.3, 24.5	by classification symbols)		
Documentation	Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched			
	ta base consulted during the international search (nar ontinuation Sheet	me of data base and, where practicable, s	earch terms used)	
C. DOC	UMENTS CONSIDERED TO BE RELEVANT			
Category *	Citation of document, with indication, where a	ppropriate, of the relevant passages	Relevant to claim No.	
A	US 5,744,448 A (KELTON et al) 28 April 1998 (2	8.04.1998), column 1, lines 59-67.	1-95	
Α .	WO 93/20199 A1 (AKZO N.V.) 14 October 1993 (	14.10.93), page 5.	1-95	
Α .	WO 97/11194 A1 (HELSINKI UNIVERSITY LICE (27.03.97), page 3.	ENSING LTD. ) 27 March 1997	1-95	
•				
	4)			
	r documents are listed in the continuation of Box C.	See patent family annex.  "T" later document published after the inte	- single Gring Ave as a large	
"A" document	defining the general state of the art which is not considered to be that relevance	date and not in conflict with the applic principle or theory underlying the inve	ation but cited to understand the	
"E" earlier ag	optication or pasent published on or after the international filing date	"X" document of particular relevance; the considered novel or cannot be consider when the document is taken alone		
"L" document establish specified	which may throw doubts on priority claim(s) or which is cited to the publication date of another citation or other special reason (as	"Y" document of particular relevance; the considered to involve an inventive step combined with one or more other such	when the document is	
"O" document	referring to an oral disclosure, use, exhibition or other means	being obvious to a person skilled in the		
"P" document priority d	published prior to the international filing date but later than the ate claimed	"&" document member of the same patent	family	
	ctual completion of the international search (31.07.2000)	Date of mailing of the international sea 21 AUG 200	rch report	
	ailing address of the ISA/US	Authorized officer	20 Maria	
Con	omissioner of Patents and Trademarks	Course Ellist Joyce /	Zudges	
	PCT dington, D.C. 20231	George Elliott	for	
	o. (703)305-3230	Telephone No. 703-308-0196	7	

Form PCT/ISA/210 (second sheet) (July 1998)

From the INTERNATIONAL PRELIMINAL	RY EXAMINING AUTHORIT	Y	
To: STEVEN J. GOLDSTEIN FROST BROWN TODD LLP 2500 PNC CENTER 201 EAST FIFTH STREET CINCINNATI, OH 45202		PCT  NOTIFICATION OF TRANSMITTAL ( INTERNATIONAL PRELIMINARY EXAMINATION REPORT (PCT Rule 71.1)	
		Date of Mailing (day/month/year	
Applicant's or agent's file referen	ce	IN	PORTANT NOTIFICATION
International application No.	International filing date (	lay/month/year)	Priority date (day/month/year)
PCT/US00/13488	16 May 2000 (16.05.2000	)	28 May 1999 (28.05.1999)
Applicant			
UNIVERSITY OF CINCINNATI			

- .
  - The applicant is hereby notified that this International Preliminary Examining Authority transmits herewith the
    international preliminary examination report and its annexes, if any, established on the international application.
  - A copy of the report and its annexes, if any, is being transmitted to the International Bureau for communication to all the elected Offices.
  - Where required by any of the elected Offices, the International Bureau will prepare an English translation of the report (but not of any annexes) and will transmit such translation to those Offices.

#### 4. REMINDER

The applicant must enter the national phase before each elected Office by performing certain acts (filing translations and paying national fees) within 30 months from the priority date (or later in some Offices)(Article 39(1))(see also the reminder sent by the International Bureau with Form PCT/IB/301).

Where a translation of the international application must be furnished to an elected Office, that translation must contain a translation of any annexes to the international preliminary examination report. It is the applicant's responsibility to prepare and furnish such translation directly to each elected Office concerned.

For further details on the applicable time limits and requirements of the elected Offices, see Volume 11 of the PCT Applicant's Guide.

Name and mailing address of the IPEA/US	Authorized officer	12. does
Commissioner of Patents and Trademarks	Jaya	Bridger
Box PCT	Janet L Epps 7	· .
Washington, D.C. 20231	1	Lu
Facsimile No. (703)305-3230	Telephone No. 703-308-0196	0

Form PCT/IPEA/416 (July 1992)

Initials J.M.

Date 3101

# INTERNATIONAL PRELIMINARY EXAMINATION REPORT 0 FE3 2031

1:1190

	(PCT Article 36 ar	d Rule 70)	141190
Applicant's r agent's file reference 91830/661	FOR FURTHER ACTIO		ion of Transmittal of International Examination Report (Form PCT/IPEA/416)
International application No.	International filing date (day/i	nonth/year)	Priority date (day/month/year)
PCT/US00/13488	16 May 2000 (16.05.2000)		28 May 1999 (28.05.1999)
International Patent Classification (IPC)	or national classification and IP	С	
IPC(6): C12N 5/00, 5/02; A01N 43/04; 24.5	A61K 31/70; C07H 21/02, 21/0	04 and US C1.: 43	5/6, 325, 375; 514/44; 536/23.1, 24.3,
Applicant			
UNIVERSITY OF CINCINNATI			
	ary examination report has t s transmitted to the applican		this International Preliminary rticle 36.
2. This REPORT consists of	a total of $\underline{\mathscr{Z}}$ sheets, including	ng this cover she	et.
which have been ame	nded and are the basis for th	is report and/or	description, claims and/or drawings sheets containing rectifications made nistrative Instructions under the PCT).
These annexes consist of a	total of $\underline{\underline{\mathcal{O}}}$ sheets.		
3. This report contains indica	tions relating to the followin	g items:	
I Basis of the repo	ort		
II Priority			
III Non-establishme	nt of report with regard to n	ovelty, inventive	step and industrial applicability
IV Lack of unity of	invention		
	ent under Article 35(2) with ations and explanations supp		y, inventive step or industrial ment
VI Certain documer	nts cited		
VII Certain defects i	n the international application	n	
VIII Certain observat	ions on the international app	lication	
Date of submission of the demand	Th.	te of completion	-64:
		-	·
29 November 2000 (29.11.2000)		February 2001 (02	2.02.2001)
Name and mailing address of the IPEA/U Commissioner of Patents and Trademark Box PCT		horized officer of	Budge
Washington, D.C. 20231 Facsimile No. (703)305-3230	Tel	enhone No. 703-	

Form PCT/IPEA/409 (cover sheet)(July 1998)

# INTERNATIONAL PRELIMINARY EXAMINATION REPORT

memational application is	•
CT/US00/13488	

L.	Basis of the report
1.	With regard to the elements of the international application:
	the international application as originally filed.
	the description:
	pages 1-65 as originally filed
	pages NONE, filed with the demand
	pages NONE, filed with the letter of
	the claims:
	pages 67-84 , as originally filed
	pages NONE, as amended (together with any statement) under Article 19
	pages NONE , filed with the demand
	pages NONE, filed with the letter of
	the drawings.
	pages 1 and 2, as originally filed
	pages NONE , filed with the demand
	pages NONE, filed with the letter of
	the sequence listing part of the description:
	pages 65-66 as originally filed
	pages NONE , filed with the demand pages NONE , filed with the letter of
_	pages NONE , filed with the letter of
۷.	language in which the international application was filed, unless otherwise indicated under this item.
	These elements were available or furnished to this Authority in the following language which is:
	the language of a translation furnished for the purposes of international search (under Rule23.1(b)).
	the language of publication of the international application (under Rule 48.3(b)).
	the language of the translation furnished for the purposes of international preliminary examination(under Rules 55.2 and/or 55.3).
3.	With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the
	international preliminary examination was carried out on the basis of the sequence listing:
	contained in the international application in printed form.
	filed together with the international application in computer readable form.
	furnished subsequently to this Authority in written form.
	furnished subsequently to this Authority in computer readable form.
	The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the
	international application as filed has been furnished.
	The statement that the information recorded in computer readable form is identical to the written sequence listing
	has been furnished.
4.	The amendments have resulted in the cancellation of:
	the description, pages NONE
	the claims, Nos. NONE
	the drawings, sheets/fig NONE
5.	This report has been established as if (some of) the amendments had not been made, since they have been considered to go
٠.	beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).**
thi	Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to it is report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17).
**	Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.

# INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application N .
PCT/US00/13488

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement			
1. STATEMENT			
Novelty (N)	Claims Claims	1-95 NONE	YES NO
Inventive Step (IS)	Claims	1-95	YES
	Claims	NONE	NO
Industrial Applicability (IA)	Claims Claims		YES
	Camis	NONE	NO
NEW CITATIONS			